(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 16 February 2006 (16.02.2006)

(10) International Publication Number WO 2006/016889 A1

(51) International Patent Classification': G
B01F 15/02

G05B 21/00,

(21) International Application Number:

PCT/US2004/041053

(22) International Filing Date:

9 December 2004 (09.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/586,189 10/887,705

8 July 2004 (08.07.2004) US 9 July 2004 (09.07.2004) US

(71) Applicant (for all designated States except US): TRES-ARK, INC. [US/US]; 14020 Lake Poway Road, Poway, CA 92064 (US).

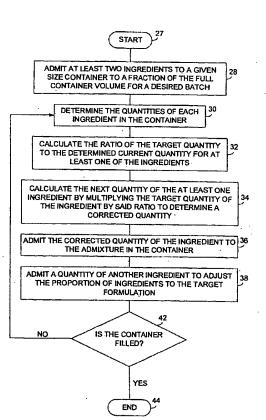
(72) Inventors; and

(75) Inventors/Applicants (for US only): SIMPSON, Michael, B. [US/US]; 815 Lower Elgin Road, Elgin, TX 78621 (US). WOODLEY, George, V. [US/US]; 4555 Kilborne Court, Reno, NE 89509 (US). ANDERSON, Gary, R. [US/US]; 7502 Loasa Cove, Austin, TX 78735 (US).

- (74) Agents: KLEINKE, Bernard L. et al.; DUCKOR SPRADLING METZGER & WYNNE, 401 West A Street, Suite 2400, San Diego, CA 92101-7915 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: CHEMICAL MIXING APPARATUS, SYSTEM AND METHOD



(57) Abstract: A system and method of formulating a batch comprising at least two ingredients. The ingredients are admitted to a container to partially fill it (28). The quantities of the ingredient in the container are determined (30), and a ratio of a target quantity to the determined current quantity for at least one ingredient is calculated (32). The next quantity of that ingredient to be admitted to the admixture is calculated by multiplying the target quantity by the calculated ratio to determine a corrected quantity (34). The corrected quantity of the ingredient is admitted to the admixture (36), and a quantity of another ingredient is admitted to the admixture to adjust the proportion of ingredients to the target formulation (38). These steps may be repeated until the batch is completed.

WO 2006/016889 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report